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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/705,645  
Filing Date: November 10, 2003  
Appellant(s): MCELRAY ET AL.

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Michael C. Prewitt  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 4, 2008 appealing from the Office action mailed January 22, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

US 5,768,079

Buell

6-1998

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6, 8, 10, 13, 15-17, 19, 36-37, 39 and 42-43 are rejected under 35 U.S.C. 102(b) as being unpatentable by Buell (US 5,768,079).

3. Regarding claims 1 and 15, Buell discloses a method for controlling a recloser for an electrical power line comprising:

determining a protective setting group, the protection setting group having at least one associated variable, wherein the at least one associated variable comprises one of a time of day, day of week, and month of year (col. 3, ll. 19-29 and col. 4, ll. 17-37). The examiner interprets the “normal, daily and/or seasonal” fluctuations as an associated variable comprising one of a time of day, day of week, and month of year

Art Unit: 2800

based on the user adjustable time constant ( $T_c$ ) in which the controller can distinguish gradual changes in the load current (i.e. changes caused by daily or seasonal fluctuations wherein the adjustable time constant ( $T_c$ ) represents the seconds or days.

determining a present condition of the at least one associated variable (col. 4, ll. 17-37). The examiner interprets the present or prevailing conditions as the adjustable time constant ( $T_c$ ) that is programmed by a user which presents the seconds or days at which the controller can distinguish gradual changes in the load currents (i.e. changes caused by daily or seasonal fluctuations), from sudden more significant fluctuations caused by various overcurrent fault conditions.

determining a behavior of function for the recloser based on the protective device operations and the present conditions (col.3, ll. 47-60 and col. 7, ll. 17-25 and ll. 41-47); and

adaptively setting the recloser to function in accordance with the behavior function (col. 3, ll. 47-60 and col. 7, ll. 17-25 and ll. 41-47). The examiner interprets the behavior functions as the various protection schemes in which the adaptive controller can operate, such as a single or three phase tripping scheme and as well as in a fuse saving or fuse clearing mode based the variable time current curve (TCC) programmed by the user to present the time (s) at which the recloser opens or closes when a fault condition is present. This variable time current curve (TCC) would be set to protect or open inline fuses in addition to the reclosers.

Art Unit: 2800

4. Regarding claims 2 and 16, Buell discloses the method according to claims 1 and 15, further comprising continuously monitoring the present condition and changing the behavior function responsive to the monitoring (col. 5, ll. 1-20 and col. 3, ll. 50-60).

5. Regarding claims 3 and 17, Buell discloses the method according to claims 2 and 16, wherein monitoring the present condition comprises monitoring at predetermined intervals (col. 5, ll. 1-20 and col. 6, ll. 40-43 and Fig. 2).

6. Regarding claims 6 and 19, Buell discloses all the limitations recited above according to claims 1 and 15.

7. Regarding claim 8, Buell discloses a recloser control system for an electrical power line, comprising all the limitations recited above, and further

a recloser (col. 1, ll. 30-49);

a memory (col.5, ll. 46-47); and

a recloser controller coupled to the recloser and the memory (col.5, ll. 46-47).

8. Regarding claim 10, Buell discloses the recloser control system according to claim 8, wherein the recloser controller comprises the memory (col. 5, ll. 46-47).

9. Regarding claim 13, Buell discloses all the limitations recited above according to claims 1 and 15.

10. Regarding claim 36, Buell discloses all the limitations recited above according to claim 8.

11. Regarding claim 37, Buell discloses all the limitations recited above in claims 1 and 15.

12. Regarding claim 39, Buell discloses all the limitations recited above in claims 1 and 15.
13. Regarding claim 42, Buell discloses all the limitations recited above in claims 1 and 15.
14. Regarding claim 43, Buell discloses all the limitations recited above in claim 8.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buell (US 5,768,079).

17. Regarding claim 38, Buell discloses the recloser control system of claim 37, except for the particularly time of day which is between 8:00 AM and 5:00 PM and the day of week is one of Monday, Tuesday, Wednesday, Thursday and Friday, then the second one of the control schemes is selected.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the workable variable range i.e. (time and day of the week) for the recloser to adaptively open and close based on the desired settings and control schemes programmed under the control of an operator (i.e. the adjustable time constant ( $T_c$ ) which represents the seconds and days of the application) to avoid

unnecessarily interrupting service (col. 2, ll. 10-23), since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

18. Regarding claim 40, Buell discloses the recloser control system of claim 39, except for the particular month comprising one of which is April, May, June, July, August and September, then the second one of the control schemes is selected.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the workable variable range i.e. (months of the year) for the recloser to adaptively open and close based on the desired settings and control schemes programmed under the control of an operator (i.e. the adjustable time constant ( $T_c$ ) which represents the seconds and days of the application) to avoid unnecessarily interrupting service (col. 2, ll. 10-23), since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

### **(10) Response to Arguments**

#### **The Rejection of Claim 1-3, 6, 8, 10, 13, 15-17, 19, 36-37, 39 and 42-43**

#### **under 35 U.S.C. 102(b) For Obviousness Based upon Buell.**

Appellant argues that Buell does not monitor or in any way determine the time of day, day of week or month of year. However, the Examiner respectfully disagrees with the Appellant's assessment. Buell discloses a method for protecting power distribution equipment comprising a universal microprocessor-based recloser controller that



operates single phase reclosers or three phase reclosers which also employs an adaptive fault protection schemes tat is capable of automatically adjusting itself to recognize gradual changes in the load current based on normal, daily and/or seasonal fluctuations so as to avoid unnecessary phase tripping and service interruptions (col. 2, ll. 12-19 and col. 3, ll. 19-29 and col. 3, ll. 47-60). The examiner interprets "daily" as the associated variable of a protective setting group comprising a day of week or weekday.

Appellant argues that Buell does not teach or suggest determining a present conditions of the at least one associated variable. However, the Examiner respectfully disagrees with the Appellant's assessment. Buell discloses determining a present condition (col. 4, ll. 44-52 and col. 4, ll. 57-67) of the at least one associated variable (i.e. the "daily" fluctuations of the load current). The gradual changes in monitoring the load current are the present or prevailing conditions of the at least one associated variable (i.e. "daily" fluctuations). Further, the microprocessor-based recloser monitors the load current (i.e. present or prevailing conditions) by comparing the difference between the value of the ground current vector (GCV) and the value for the ground offset vector (GOV) with a variable called the Ground Minimum Trip (GMT) current (col. 4, ll. 59-67). By periodically comparing the value of the GOV and the value of the GCV, the controller (i.e. microprocessor) can distinguish gradual changes in load current (i.e. changes caused by "daily" fluctuations). Further, the Appellant concedes that the user or technician is programming the protection setting group of the microcontroller and it seems that the Appellant protection setting group is determined the microcontroller itself, however, the claim merely states determining a protection setting group which

Buell discloses as mentioned above and not how or who does the programming for the protection setting group.

Appellant argues that Buell does not teach or suggest multiple behavior functions such as three phase or single phase. However, the Examiner respectfully disagrees with the Appellant's assessment. Buell teaches a microprocessor-based recloser that implements various fault protection schemes such as single and three-phase protection modes (col. 2, ll. 12-14 and col. 3, ll. 50-60 and col. 10, ll. 66 thru col. 7, ll. 1-5).

In response to Appellant's argument that Buell fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the actual time of day (i.e. 3:00pm), day of week (i.e. Wednesday) or month of year (i.e. May) are not recited in the 102 rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is noted that no arguments have been provided for the 35 U.S.C. 103(a) rejections of claims 38 and 40. Therefore, the examiner still maintains that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the workable variable range (i.e. the preferred time of day, 8:00AM; day of week, Monday; or month of the year, April) for the microprocessor-based recloser to adaptively operate the recloser based on the desired protection control scheme and monitored load current to avoid unnecessarily tripping and interrupting power to the consumer (col. 2, ll. 10-23), since it has been held that where the general conditions of

Art Unit: 2800

a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Lastly, Appellant's arguments with respect to claims 36-37, 39 and 42-43 are similar to the arguments presented for claims 1, 8, and 15. These arguments have previously been addressed above in regards to Buell determining a protection setting group having at least one associated variable, wherein the at least one associated variable comprises day of week (col. 3, ll. 19-29).

For the above reasons, it is believed that the rejections should be sustained.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

/Terrence Willoughby/

/Michael J Sherry/

Supervisory Patent Examiner, Art Unit 2836

Conferees:

/Michael J Sherry/

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/David S Blum/TQAS Appeal Specialist, TC 2800